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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/749,752	12/28/2000	Taizo Akimoto	Q61244	4934
7590	11/23/2005		EXAMINER	
SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC 2100 Pennsylvania Avenue, N. W. Washington, DC 20037-3202			GOLDBERG, JEANINE ANNE	
		ART UNIT	PAPER NUMBER	
		1634		

DATE MAILED: 11/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/749,752	AKIMOTO, TAIZO
	Examiner Jeanine A. Goldberg	Art Unit 1634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 27 September 2005.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 7,8,10,11 and 18-21 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 7,8,10,11 and 18-21 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_  
 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_

## DETAILED ACTION

1. This action is in response to the papers filed September 27, 2005. Currently, claims 7-8, 10-11, 18-21 are pending.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 7-8, 10-11, 18-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Shiraishi et al. (US Pat. 4,617,468, October 14, 1986).

Given the clear decision by the Board of Appeals on September 27, 2005, the "means for obtaining information concerning the positions of the probes to which the target substance has bound and simultaneously detecting the management information attached to the test piece" has been defined by the decision and the specification as a "stimulable phosphor sheet" (see page 6 of the decision).

In Re Donaldson, 16 F.3d 1189, 1193, 29 USPQ2d 1845, 1848 (Fed. Cir. 1994), the court held: The plain and unambiguous meaning of paragraph six is that one construing means- plus-function language in a claim must look to the specification and interpret that language in light of the corresponding structure, material, or acts described therein, and equivalents thereof, to the extent that the specification provides such disclosure.

Shiraishi et al. (herein referred to as Shiraishi) teaches a stimulable phosphor sheet with hydrophilic surface. Shiraishi teaches an analysis system comprising an electrophoretic gel (means for attaching management information peculiar to the test piece to a predetermined location on the test piece using a marker the same as or similar to the marker used for marking the target substance), a stimulable phosphor sheet (means for obtaining information concerning the positions of the probes to which the target substance has bound and simultaneously detecting the management information attached to the test piece), and the stimulable phosphor sheet (means for storing the management information in association with the information concerning the positions of the probes to which the target substance has bound). Specifically, Shiraishi illustrates, in Figure 1 an example of a read-out system for reading out the locational information of the radioactively labeled substances copied and stored in a stimulable phosphor sheet (col. 6, lines 25-35). Shiraishi teaches that radioactively labeled substances originating from an organism include polymeric substances such as proteins, nucleic acids, derivatives thereof or cleavage products thereof provided with a radioactive label (col. 13, lines 25-35). Shiraishi teaches the labeled substance may be

resolved using support mediums such as electrophoresis. Therefore, Shiraishi teaches electrophoresis as a means for attaching the labeled substances to the test piece.

Shiraishi teaches the read-out procedure of the autoradiograph copied and stored in the stimulable phosphor sheet can be done in the composite form containing the support medium or after removing the support medium therefrom (col. 14, lines 34-45).

Therefore Shiraishi teaches that the stimulable phosphor sheet is a means for obtaining information about positions of the probes, but also a means for storing the information with the information concerning the position

3. Claims 7-8, 10-11, 18-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Neriishi et al. (US Pat. 6,746,840, June 8, 2004).

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Given the clear decision by the Board of Appeals on September 27, 2005, the "means for obtaining information concerning the positions of the probes to which the target substance has bound and simultaneously detecting the management information attached to the test piece" has been defined by the decision and the specification as a "stimulable phosphor sheet" (see page 6 of the decision).

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interpret that language in light of the corresponding structure, material, or acts described therein, and equivalents thereof, to the extent that the specification provides such disclosure.

Neriishi teaches an analysis system comprising a stimulable phosphor sheet (means for obtaining information concerning the positions of the probes to which the target substance has bound and simultaneously detecting the management information attached to the test piece), a spotter device (means for attaching management information peculiar to the test piece to a predetermined location on the test piece using a marker the same as or similar to the marker used for marking the target substance) and a computer (means for storing the management information in association with the information concerning the positions of the probes to which the target substance has bound). Specifically, Neriishi teaches a microarray and analyzing method which uses the microarray. Neriishi's microarray comprises a stimulable phosphor sheet and multiple kinds of biomolecules arrayed and fixed on the stimulable phosphor sheet. Neriishi teaches that the biomolecules are arrayed and fixed in a dot-like form on the surface of the stimulable phosphor sheet by the utilization of a commercially available spotter device (col. 6, lines 34-37). Neriishi further teaches the entire area of the stimulable phosphor sheet is exposed to visible light and information is able to be obtained when exposed to a reading laser beam which causes the stimulable phosphor sheet to emit light (col. 6-7). The light emitted from the site on the stimulable phosphor sheet is photoelectrically detected with a photomultiplier tube (PMT) and the electric signal is thereby obtained from the PMT. The electric signal is fed into a computer and

the information representing the position of the light emission is stored in the computer (col. 7, lines 10-15). Figure 5 illustrates a stimulable phosphor sheet in connection with a computer "C".

With regard to Claim 7 which requires an additional means for searching through the means for storing referring to specified management information to find the information concerning the positions of the probes to which the target substrate has bound associated with the specified management information, Nerisshi teaches determining the identify of the one or more members of the series based on previously stored positional information (see limitations of Claim 5 (viii) of Nerisshi). In order to do this assignment, the system inherently would comprise a means for searching through the information.

Given the teachings of Nerisshi, describing a system comprising a spotter, a stimulable phosphor sheet and a computer, each limitation of the instant claim is meet.

### ***Conclusion***

#### **4. No claims allowable over the art.**

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Jeanine Goldberg whose telephone number is (571) 272-0743. The examiner can normally be reached Monday-Friday from 7:00 a.m. to 4:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Jones, can be reached on (571) 272- 0745.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status

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information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

The Central Fax Number for official correspondence is (571) 273-8300.



Jeanine Goldberg

Primary Examiner

November 16, 2005



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